

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-008798**Date Inspected:** 27-Aug-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** **Yes No N/A****Rod Oven in Use:** **Yes No N/A****Electrode to specification:** **Yes No N/A****Weld Procedures Followed:** **Yes No N/A****Qualified Welders:** **Yes No N/A****Verified Joint Fit-up:** **Yes No N/A****Approved Drawings:** **Yes No N/A****Approved WPS:** **Yes No N/A****Delayed / Cancelled:** **Yes No N/A****Bridge No:** 34-0006**Component:** OBG Trail Assembly**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 3AE

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron Splice Plates. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed bolts tension verification at PP 19 and PP 20. Bolt sizes used were M22 x 75 RC Set# DHGM220005 (Lower Chevron East Side Splice Plate being offered and inspected at PP 19 and 20) and final Torque required was 473 N-m; M22 x 65 RC Set# DHGM220033 (East Side 2 Bolts for Lower Chevron Angles connecting the floor beam flange to the Lower Chevron Splice Plate being offered and inspected at PP 20) and final Torque required is 470 N-m and M22 x 70 RC Set# DHGM200004 (West side Lower Chevron Splice Plate to "I" Beam installed at Floor Beam and inspected at PP 20) and final torque required was 453 N-m. Manual Torque wrench is been used with Sr. No. XQ2-584.

Lift 4 (West)

This Quality Assurance (QA) Inspector witnessed final tension verification for FL3 to Bottom Panel at PP 26, PP 27 and PP 28. Inspected 10% on a random basis and found the tension to be in general compliance. Bolt sizes used

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

were M24 x 70 RC Set# DHGM240010 and final Torque required was 560 N-m; M24 x 65 RC Set# DHGM240009 and final Torque required was 567 N-m and M24 x 60 RC Set# DHGM240014 and final Torque required was 567 N-m. Manual Torque wrench is been used with Sr. No. XQ2-58. At PP 26 (2 Column x 9 Rows), 27 (4 Column x 9 Rows) and at 28 (2 Column and 9 Rows) bolts not been installed as segment will be resting on this areas during transportation i.e., sea fasteners structures.

Lift 4 West

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron Splice Plates. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed bolts tension verification at

At PP 24 Cross Beam East side splice plate and Bolt Size used was M22 x 70 RC Set# DHGM220020 and final Torque required was 520 N-m.

At PP 24 Cross Beam West side splice plate and Bolt Size used was M22 x 75 RC Set# DHGM220005 and final Torque required was 473 N-m.

At PP 25 Cross Beam East side splice plate and Bolt Size used was M22 x 75 RC Set# DHGM220005 and final Torque required was 473 N-m.

At PP 26 Cross Beam West side splice plate and Bolt Size used was M22 x 75 RC Set# DHGM220005 and final Torque required was 473 N-m.

At PP 28 Cross Beam East side splice plate and Bolt Size used was M22 x 75 RC Set# DHGM220005 and final Torque required was 473 N-m.

Manual Torque wrench was been used with Sr. No. XQ2 -584.

Lift 3 West

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron Splice Plates. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed bolts tension verification at

At PP 22 Counter Weight East side splice plate and Bolt Size used was M22 x 75 RC Set# DHGM220005 and final Torque required was 473 N-m.

At PP 22 Cross Beam West side splice plate and Bolt Size used was M22 x 75 RC Set# DHGM220005 and final Torque required was 473 N-m.

Segment 2AE

This Quality Assurance (QA) Inspector witnessed final tension verification for Suspender Bracket at Bike Path

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

side at PP 14. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed bolts tension verification at PP 14 Bike Path side. Bolt sizes used were M24 x 75 RC Set# DHGM240020 and final Torque required was 600 N-m; M24 x 85 RC Set# DHGM240015 and final Torque required is 517 N-m and M27 x 85 RC Set# DHGM270001 and final Torque required was 853 N-m. Manual Torque wrench is been used with Sr. No. XQ2 -584.

Segment 1AE

This Quality Assurance (QA) Inspector witnessed final tension verification for Lower Chevron Splice Plates. Inspected 10% on a random basis and found the tension to be in general compliance. Witnessed bolts tension verification at

At PP 8.5 Bike Path East side for Angle connecting the Floor Beam Flange to the Splice Plate and Bolt Size used was M22 x 65 RC Set# DHGM220033 and final Torque required was 470 N-m.

At PP 8.5 Bike Path East side splice plate and Bolt Size used was M22 x 70 RC Set# DHGM220005 and final Torque required was 473 N-m.

Manual Torque wrench is been used with Sr. No. XQ2 -584.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact , who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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